Joseph Leckie Academy



Key Stage 4 Core Curriculum and Option Subjects

Separate Sciences / AQA

Students who have a keen interest in or aptitude for science will have the opportunity to study three separate sciences at Key Stage 4. Students will initially cover the content of the core and additional sciences courses in order to gain the knowledge that will be required to continue studies in greater depth. This is an ideal course for those students wishing to pursue a career in the varied aspects of science, whether it is medical, forensic or engineering. Successful studies in this area can lead to places at the best universities which are well respected by employers. Students will study one extra extension unit in each of the three strands of biology, chemistry and physics. By following this route students have the opportunity to gain three GCSE qualifications, one in each science discipline



Course Content

Having already studied core and additional science material, students will go on to study the following content:

Biology covers further studies of plants and animals. This includes movement of chemical substances in plants and animals and homeostasis. Students will also examine how humans are polluting the environment.

Chemistry covers the periodic table, analytical techniques, water chemistry and the production of fertilisers.

Physics covers the fast expanding uses of physics in medical applications and the physics of mechanical machines.

Students will complete many practical investigations in all three sciences, which contribute 25% of each qualification

<u>Assessment</u>

Students will complete three examinations and one controlled assessment unit in each science discipline over the three year period from year 9

Progression

Success in these qualifications offers excellent preparation for A Levels in biology, chemistry and physics.